

## DETAILED ACTION

### ***Response to Arguments***

1. In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).
2. Applicant's arguments filed December 9, 2009 have been fully considered but they are not persuasive. Applicant's arguments that there is no commonality between the cited art is not persuasive. The methods taught in the art are combinable as all are directed toward hot forging, lubrication, and metal working. Masaji teaches steps of applying lubricant prior to chamfering followed by another lubricating step as cited in the claims. Additionally, it would be obvious to take the lubricant applicator of Hayes to apply the multiple lubricating steps.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-8, 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Publication No. 61-126940 in view of Hayes US Patent No. 5,531,085 and in further view of Oohama et al. US Patent Application Publication No. 200301681269241. Japanese Patent Application Publication No. 61-126940 discloses a forging method for applying a lubricant to a workpiece (11a) in multiple steps. Japanese Patent Application Publication No. 61-126940 does not disclose applying the lubricant via spraying. Hayes teaches a lubrication system with nozzles (24) that are programmable to operate intermittently, a conveying unit (114, 116) for transferring the workpiece (column 3, line 51-column 4, line 19). It would have been obvious to one skilled in the art to provide the device of Japanese Patent Application Publication No. 61-126940 with the intermittent spraying lubrication nozzles of Hayes because intermittent lubrication application allows for incremental adjustment of lubrication as suited for processing needs. Japanese Patent Application Publication No. 61-126940 in view of Hayes does not disclose a forging method with a contact-velocity universal joint outer race as the workpiece or a method where the temperature ranges from 150°C to 250°C when the lubricant is applied. Oohama teaches a workpiece with a cup section (8) and a shaft section (7) (paragraph 78, see figure 2G). It

would have been obvious to one skilled in the art to design a workpiece with a cup section and shaft section to ensure a proper press fit.

6. Regarding claims 3 and 12, Oohama teaches forging at a low temperature (paragraph 54); furthermore, Hayes discloses the claimed invention except for the specific temperature ranges. It would have been obvious to one having ordinary skill in the art at the time the invention was made to perform cold forging between 150°C to 250°C, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It would have been obvious to one skilled in the art to produce a cup- or shaft-shaped constant-velocity universal outer race as the forging product as it common product formed by forging presses well-known in the art.

7. Japanese Patent Application Publication No. 61-126940 in view of Hayes and in further view of Oohama does not disclose a drying step between the two lubrication steps. Japanese Patent Application Publication 2002059241 teaches a lubricant applicator for a forging method with a drying station (3) after the lubricant is applied to the workpiece. It would have been obvious to one skilled in the art provide a means for drying between lubricant steps as complete drying of each lubricant layer ensures complete lubrication of the workpiece.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephanie Jennings whose telephone number is (571) 270-7392. The examiner can normally be reached on Monday-Thursday, 7 am - 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edward Tolan/  
Primary Examiner, Art Unit 3725

/S. J./  
Examiner, Art Unit 3725  
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